



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Takumi ITO, et al.

Title: TRANSMITTER APPARATUS, RECEIVER APPARATUS, AND  
RADIO COMMUNICATION SYSTEM

Appl. No.: 10/564,552

Filing Date: 01/13/2006

Examiner: Unassigned

Art Unit: Unassigned

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR §1.56**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith on Form PTO/SB/08 is a listing of documents known to Applicants in order to comply with Applicants' duty of disclosure pursuant to 37 CFR §1.56.

A copy of each non-U.S. patent document and each non-patent document is being submitted to comply with the provisions of 37 CFR §1.97 and §1.98.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

The listed documents are being submitted in compliance with 37 CFR §1.97(b), within three (3) months of the filing date of the application.

**RELEVANCE OF EACH DOCUMENT**

Document A1 is a U.S. counterpart of Document A4.

The relevance of Documents A4, A5 and A6 is described in the present specification.

Documents A2, A3, A7 and A8, listed on the attached PTO/SB/08, were cited as being relevant during the prosecution of the corresponding International application. A copy of the International Search Report is attached setting forth the portion of each document considered relevant by the examiner. An English translation of the foreign-language documents is not readily available; however, the absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR §1.98 and MPEP §609). English language abstracts are attached.

Applicants respectfully request that each listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or

even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date: February 10, 2006

FOLEY & LARDNER LLP  
Customer Number: 22428  
Telephone: (202) 672-5407  
Facsimile: (202) 672-5399

By


Phillip J. Anticola

*Reg. No.*  
38,819

*for* /

David A. Blumenthal  
Attorney for Applicant  
Registration No. 26,257

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  Date Submitted: February 10, 2006 (use as many sheets as necessary)			<b>Complete if Known</b>		
Sheet	1	of	1	Application Number 10/564,552 Filing Date 01/13/2006 First Named Inventor Takumi ITO Group Art Unit Unassigned Examiner Name Unassigned Attorney Docket Number 016778-0503	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
	A1	2003/0003937	A1	OHKUBO et al.	01-02-2003	

U.S. PATENT APPLICATION DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Application Document		Name of Patentee or Applicant of Cited Document	Filing Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Serial Number	Kind Code* (if known)			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)			
	A2	JP	2004-248075	A	NTT IDO TSUSHINMO KK	09-02-2004	A
	A3	JP	2004-056569	A	MATSUBISHI DENKI SANGYO KK	02-19-2004	
	A4	JP	2003-078480	A	NTT DOCOMO INC.	03-14-2003	A
	A5	JP	57-155856		FUJITSU LTD.	09-27-1982	A
	A6	JP	2001-103041	A	KOKUSAI DENKI KK	04-13-2001	A

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>6</sup>
	A7	K. MIYASHITA et al., "Eigenbeam-Space Division Multiplexing (E-SDM) in a MIMO Channel," The Institute of Electronics, Information and Communication Engineers, Vol. 102:86, 24 May 2002; pp. 13-18.		A
	A8	Y. TENG et al., "Performance Analysis of SDM-OFDM System with Adaptive Modulation Method over MIMO Channels," The Institute of Electronics, Information and Communication Engineers, Vol. 103:66, 23 May 2003; pp. 75-82.		A

Examiner Signature	/Shaima Aminzay/	Date Considered	11/21/2008
--------------------	------------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. \*See attached Kinds of U.S. Patent Documents. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>2</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.